

**10/561665**

**IAP20 Rec'd PCT/PTO 20 DEC 2005**

Application No. (if known): Not Yet Assigned

Attorney Docket No.: HO-P03263US0

## **Certificate of Express Mailing Under 37 CFR 1.10**

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P.O. Box 1450  
Alexandria, VA 22313-1450

on December 20, 2005  
Date



Signature

Allen E. White, Ph.D.

Typed or printed name of person signing Certificate

55,727  
Registration Number, if applicable

(713) 651-8464  
Telephone Number

Note: Each paper must have its own certificate of mailing, or this certificate must identify each submitted paper.

Transmittal Letter to the United States Designated-Elected Office (3 pages)  
Fee Transmittal (1 page)  
Copy of PCT/JP2004/008521  
International Search Report  
Specification (25 pages); (Figures – 4 pages)  
Preliminary Amendment (4 pages)  
Declaration (2 pages)  
Application Data Sheet (6 pages)  
Recordation Form Cover Sheet (2 pages)  
Assignment (4 pages)  
Return Postcard  
Check in the amount of \$1,000.00

IAP20 Rec'd POT/PTO 20 DEC 2005

PTO/SB/17 (12-04v2)

Approved for use through 7/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no person are required to respond to a collection of information unless it displays a valid OMB control number.

Effective on 12/08/2004.

Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

# FEE TRANSMITTAL

## For FY 2005

 Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 1,000.00)

Complete if Known

107561665

|                      |                       |
|----------------------|-----------------------|
| Application Number   | Not Yet Assigned      |
| Filing Date          | Concurrently Herewith |
| First Named Inventor | Kunio Awazu           |
| Examiner Name        | Not Yet Assigned      |
| Art Unit             | N/A                   |
| Attorney Docket No.  | HO-P03263US0          |

## METHOD OF PAYMENT (check all that apply)

Check     Credit Card     Money Order     None     Other (please identify): \_\_\_\_\_  
 Deposit Account    Deposit Account Number: 06-2375    Deposit Account Name: Fulbright & Jaworski L.L.P.

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

|   |   |
|---|---|
| <input type="checkbox"/> Charge fee(s) indicated below  | <input type="checkbox"/> Charge fee(s) indicated below, except for the filing fee |
| <input checked="" type="checkbox"/> Charge any additional fee(s) or underpayment of fee(s) under 37 CFR 1.16 and 1.17 | <input checked="" type="checkbox"/> Credit any overpayments                       |

## FEE CALCULATION

## 1. BASIC FILING, SEARCH, AND EXAMINATION FEES

| <u>Application Type</u> | <u>FILING FEES</u> |                              | <u>SEARCH FEES</u> |                              | <u>EXAMINATION FEES</u> |                              |                       |
|-------------------------|--------------------|------------------------------|--------------------|------------------------------|-------------------------|------------------------------|-----------------------|
|                         | <u>Fee (\$)</u>    | <u>Small Entity Fee (\$)</u> | <u>Fee (\$)</u>    | <u>Small Entity Fee (\$)</u> | <u>Fee (\$)</u>         | <u>Small Entity Fee (\$)</u> | <u>Fees Paid (\$)</u> |
| Utility                 | 300                | 150                          | 500                | 250                          | 200                     | 100                          | 1,000.00              |
| Design                  | 200                | 100                          | 100                | 50                           | 130                     | 65                           |                       |
| Plant                   | 200                | 100                          | 300                | 150                          | 160                     | 80                           |                       |
| Reissue                 | 300                | 150                          | 500                | 250                          | 600                     | 300                          |                       |
| Provisional             | 200                | 100                          | 0                  | 0                            | 0                       | 0                            |                       |

## 2. EXCESS CLAIM FEES

## Fee Description

Each claim over 20 (including Reissues)

|                 |                              |
|-----------------|------------------------------|
| <u>Fee (\$)</u> | <u>Small Entity Fee (\$)</u> |
|-----------------|------------------------------|

50 25

Each independent claim over 3 (including Reissues)

200 100

Multiple dependent claims

360 180

| Total Claims | Extra Claims | Fee (\$) | Fee Paid (\$) | Multiple Dependent Claims            |
|--------------|--------------|----------|---------------|--------------------------------------|
| - 20 =       | x            | =        |               | <u>Fee (\$)</u> <u>Fee Paid (\$)</u> |
| - 3 =        | x            | =        |               |                                      |

## 3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

|                     |                     |   |                 |                       |
|---------------------|---------------------|---|-----------------|-----------------------|
| <u>Total Sheets</u> | <u>Extra Sheets</u> | <u>Number of each additional 50 or fraction thereof</u> | <u>Fee (\$)</u> | <u>Fee Paid (\$)</u>  |
| 5                   | - 100 =             | /50 (round up to a whole number) x                      | =               | <u>Fees Paid (\$)</u> |

## 4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): \_\_\_\_\_

| SUBMITTED BY      |                       |                                      |                        |                          |
|-------------------|-----------------------|--------------------------------------|------------------------|--------------------------|
| Signature         |                       | Registration No.<br>(Attorney/Agent) | 55,727                 | Telephone (713) 651-8464 |
| Name (Print/Type) | Allen E. White, Ph.D. |                                      | Date December 20, 2005 |                          |

IAP4 Rec'd PCT/PTO 20 DEC 2005

PTO-1390 (Rev. 07-2005)

Approved for use through 03/31/2007. OMB 0651-0021

U. S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

|  |                                       |   |
|--|---------------------------------------|---|
| <b>TRANSMITTAL LETTER TO THE UNITED STATES<br/>DESIGNATED/ELECTED OFFICE (DO/EO/US)<br/>CONCERNING A SUBMISSION UNDER 35 U.S.C. 371</b>  |                                       | ATTORNEY'S DOCKET NUMBER<br>HO-P03263US0                            |
| INTERNATIONAL APPLICATION NO.<br>PCT/JP2004/008521   | INTERNATIONAL FILING DATE<br>06/17/04 | U.S. APPLICATION NO. (if known, see 37 CFR 1.5)<br><b>10/561665</b> |
|  |                                       | PRIORITY DATE CLAIMED<br>06/20/03                                   |
| TITLE OF INVENTION<br>CELL MICROCHIP   |                                       |   |
| APPLICANT(S) FOR DO/EO/US<br>Kunio Awazu et al.  |                                       |   |
| Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:  |                                       |   |
| <p>1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a submission under 35 U.S.C. 371.</p> <p>2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a submission under 35 U.S.C. 371.</p> <p>3. <input checked="" type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.</p> <p>4. <input type="checkbox"/> The US has been elected (Article 31).</p> <p>5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371 (c)(2))<br/>a. <input checked="" type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau).<br/>b. <input type="checkbox"/> has been communicated by the International Bureau.<br/>c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).</p> <p>6. <input checked="" type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).<br/>a. <input checked="" type="checkbox"/> is attached hereto.<br/>b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4).</p> <p>7. <input type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))<br/>a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau).<br/>b. <input type="checkbox"/> have been communicated by the International Bureau.<br/>c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.<br/>d. <input type="checkbox"/> have not been made and will not be made.</p> <p>8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</p> <p>9. <input checked="" type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).</p> <p>10. <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).</p> |                                       |   |
| <b>Items 11 to 20 below concern document(s) or information included:</b>   |                                       |   |
| <p>11. <input type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.</p> <p>12. <input checked="" type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.</p> <p>13. <input checked="" type="checkbox"/> A preliminary amendment.</p> <p>14. <input checked="" type="checkbox"/> An Application Data Sheet under 37 CFR 1.76.</p> <p>15. <input checked="" type="checkbox"/> A substitute specification.</p> <p>16. <input type="checkbox"/> A power of attorney and/or change of address letter.</p> <p>17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 – 1.825.</p> <p>18. <input type="checkbox"/> A second copy of the published International Application under 35 U.S.C. 154(d)(4).</p> <p>19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).</p>  |                                       |   |

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|  |  |   |   |       |              |              |  |     |           |  |                            |       |  |  |   |     |  |  |   |       |  |  |   |       |  |  |                           |       |  |  |                                 |  |             |  |   |  |  |  |              |              |   |      |         |       |  |            |  |  |  |    |        |              |              |      |              |        |  |   |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |  |                   |  |  |             |   |  |  |    |                             |  |  |             |  |  |  |    |                              |  |  |             |                        |  |    |  |                      |  |    |  |
|--|--|---|---|-------|--------------|--------------|--|-----|-----------|--|----------------------------|-------|--|--|---|-----|--|--|---|-------|--|--|---|-------|--|--|---------------------------|-------|--|--|---------------------------------|--|-------------|--|---|--|--|--|--------------|--------------|---|------|---------|-------|--|------------|--|--|--|----|--------|--------------|--------------|------|--------------|--------|--|---|--------------------|-------|--|---|---|--|--|---|--------------------------------------|--|--|-------------|--|--|--|--|-------------------|--|--|-------------|---|--|--|----|-----------------------------|--|--|-------------|--|--|--|----|------------------------------|--|--|-------------|------------------------|--|----|--|----------------------|--|----|--|
| U. S. APPLICATION NO. (Unknown See 37 CFR 1.5)   | INTERNATIONAL APPLICATION NO.<br>PCT/JP2004/008521 | ATTORNEY'S DOCKET NUMBER<br>HO-P03263US0                                      |   |       |              |              |  |     |           |  |                            |       |  |  |   |     |  |  |   |       |  |  |   |       |  |  |                           |       |  |  |                                 |  |             |  |   |  |  |  |              |              |   |      |         |       |  |            |  |  |  |    |        |              |              |      |              |        |  |   |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |  |                   |  |  |             |   |  |  |    |                             |  |  |             |  |  |  |    |                              |  |  |             |                        |  |    |  |                      |  |    |  |
| 20. <input checked="" type="checkbox"/> Other items or information: Return Receipt Postcard  |  |   |   |       |              |              |  |     |           |  |                            |       |  |  |   |     |  |  |   |       |  |  |   |       |  |  |                           |       |  |  |                                 |  |             |  |   |  |  |  |              |              |   |      |         |       |  |            |  |  |  |    |        |              |              |      |              |        |  |   |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |  |                   |  |  |             |   |  |  |    |                             |  |  |             |  |  |  |    |                              |  |  |             |                        |  |    |  |                      |  |    |  |
| <p>The following fees have been submitted</p> <table border="1"> <tr> <td>21. <input checked="" type="checkbox"/> Basic national fee (37 CFR 1.492(a)).....</td> <td>\$300</td> <td>CALCULATIONS</td> <td>PTO USE ONLY</td> </tr> <tr> <td>22. <input checked="" type="checkbox"/> Examination fee (37 CFR 1.492(c))<br/>If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4).....</td> <td>\$0</td> <td>\$ 200.00</td> <td></td> </tr> <tr> <td>All other situations .....</td> <td>\$200</td> <td></td> <td></td> </tr> <tr> <td>23. <input checked="" type="checkbox"/> Search fee (37 CFR 1.492(b))<br/>If the written opinion of the ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) .....</td> <td>\$0</td> <td></td> <td></td> </tr> <tr> <td>Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority .....</td> <td>\$100</td> <td></td> <td></td> </tr> <tr> <td>International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB.....</td> <td>\$400</td> <td></td> <td></td> </tr> <tr> <td>All other situations.....</td> <td>\$500</td> <td></td> <td></td> </tr> <tr> <td colspan="2"><b>TOTAL OF 21, 22 and 23 =</b></td> <td>\$ 1,000.00</td> <td></td> </tr> <tr> <td colspan="3"> <input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)).<br/>The fee is \$250 for each additional 50 sheets of paper or fraction thereof.         </td> <td></td> </tr> <tr> <td>Total Sheets</td> <td>Extra Sheets</td> <td>Number of each additional 50 or fraction thereof (round up to a whole number)</td> <td>RATE</td> </tr> <tr> <td>- 100 =</td> <td>/50 =</td> <td></td> <td>x \$250.00</td> </tr> <tr> <td colspan="3">Surcharge of \$130 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).</td> <td>\$</td> </tr> <tr> <td>CLAIMS</td> <td>NUMBER FILED</td> <td>NUMBER EXTRA</td> <td>RATE</td> </tr> <tr> <td>Total claims</td> <td>- 20 =</td> <td></td> <td>x</td> </tr> <tr> <td>Independent claims</td> <td>- 3 =</td> <td></td> <td>x</td> </tr> <tr> <td colspan="3">MULTIPLE DEPENDENT CLAIM(S) (if applicable)</td> <td>+</td> </tr> <tr> <td colspan="3"><b>TOTAL OF ABOVE CALCULATIONS =</b></td> <td>\$ 1,000.00</td> </tr> <tr> <td colspan="3"> <input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by ½.         </td> <td></td> </tr> <tr> <td colspan="3"><b>SUBTOTAL =</b></td> <td>\$ 1,000.00</td> </tr> <tr> <td colspan="3">Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).</td> <td>\$</td> </tr> <tr> <td colspan="3"><b>TOTAL NATIONAL FEE =</b></td> <td>\$ 1,000.00</td> </tr> <tr> <td colspan="3">Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +</td> <td>\$</td> </tr> <tr> <td colspan="3"><b>TOTAL FEES ENCLOSED =</b></td> <td>\$ 1,000.00</td> </tr> <tr> <td colspan="2">Amount to be refunded:</td> <td colspan="2">\$</td> </tr> <tr> <td colspan="2">Amount to be charged</td> <td colspan="2">\$</td> </tr> </table> |  |   | 21. <input checked="" type="checkbox"/> Basic national fee (37 CFR 1.492(a))..... | \$300 | CALCULATIONS | PTO USE ONLY | 22. <input checked="" type="checkbox"/> Examination fee (37 CFR 1.492(c))<br>If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)..... | \$0 | \$ 200.00 |  | All other situations ..... | \$200 |  |  | 23. <input checked="" type="checkbox"/> Search fee (37 CFR 1.492(b))<br>If the written opinion of the ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) ..... | \$0 |  |  | Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority ..... | \$100 |  |  | International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB..... | \$400 |  |  | All other situations..... | \$500 |  |  | <b>TOTAL OF 21, 22 and 23 =</b> |  | \$ 1,000.00 |  | <input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)).<br>The fee is \$250 for each additional 50 sheets of paper or fraction thereof. |  |  |  | Total Sheets | Extra Sheets | Number of each additional 50 or fraction thereof (round up to a whole number) | RATE | - 100 = | /50 = |  | x \$250.00 | Surcharge of \$130 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)). |  |  | \$ | CLAIMS | NUMBER FILED | NUMBER EXTRA | RATE | Total claims | - 20 = |  | x | Independent claims | - 3 = |  | x | MULTIPLE DEPENDENT CLAIM(S) (if applicable) |  |  | + | <b>TOTAL OF ABOVE CALCULATIONS =</b> |  |  | \$ 1,000.00 | <input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by ½. |  |  |  | <b>SUBTOTAL =</b> |  |  | \$ 1,000.00 | Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)). |  |  | \$ | <b>TOTAL NATIONAL FEE =</b> |  |  | \$ 1,000.00 | Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property + |  |  | \$ | <b>TOTAL FEES ENCLOSED =</b> |  |  | \$ 1,000.00 | Amount to be refunded: |  | \$ |  | Amount to be charged |  | \$ |  |
| 21. <input checked="" type="checkbox"/> Basic national fee (37 CFR 1.492(a)).....  | \$300  | CALCULATIONS  | PTO USE ONLY  |       |              |              |  |     |           |  |                            |       |  |  |   |     |  |  |   |       |  |  |   |       |  |  |                           |       |  |  |                                 |  |             |  |   |  |  |  |              |              |   |      |         |       |  |            |  |  |  |    |        |              |              |      |              |        |  |   |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |  |                   |  |  |             |   |  |  |    |                             |  |  |             |  |  |  |    |                              |  |  |             |                        |  |    |  |                      |  |    |  |
| 22. <input checked="" type="checkbox"/> Examination fee (37 CFR 1.492(c))<br>If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4).....   | \$0  | \$ 200.00   |   |       |              |              |  |     |           |  |                            |       |  |  |   |     |  |  |   |       |  |  |   |       |  |  |                           |       |  |  |                                 |  |             |  |   |  |  |  |              |              |   |      |         |       |  |            |  |  |  |    |        |              |              |      |              |        |  |   |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |  |                   |  |  |             |   |  |  |    |                             |  |  |             |  |  |  |    |                              |  |  |             |                        |  |    |  |                      |  |    |  |
| All other situations .....   | \$200  |   |   |       |              |              |  |     |           |  |                            |       |  |  |   |     |  |  |   |       |  |  |   |       |  |  |                           |       |  |  |                                 |  |             |  |   |  |  |  |              |              |   |      |         |       |  |            |  |  |  |    |        |              |              |      |              |        |  |   |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |  |                   |  |  |             |   |  |  |    |                             |  |  |             |  |  |  |    |                              |  |  |             |                        |  |    |  |                      |  |    |  |
| 23. <input checked="" type="checkbox"/> Search fee (37 CFR 1.492(b))<br>If the written opinion of the ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) .....  | \$0  |   |   |       |              |              |  |     |           |  |                            |       |  |  |   |     |  |  |   |       |  |  |   |       |  |  |                           |       |  |  |                                 |  |             |  |   |  |  |  |              |              |   |      |         |       |  |            |  |  |  |    |        |              |              |      |              |        |  |   |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |  |                   |  |  |             |   |  |  |    |                             |  |  |             |  |  |  |    |                              |  |  |             |                        |  |    |  |                      |  |    |  |
| Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority .....  | \$100  |   |   |       |              |              |  |     |           |  |                            |       |  |  |   |     |  |  |   |       |  |  |   |       |  |  |                           |       |  |  |                                 |  |             |  |   |  |  |  |              |              |   |      |         |       |  |            |  |  |  |    |        |              |              |      |              |        |  |   |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |  |                   |  |  |             |   |  |  |    |                             |  |  |             |  |  |  |    |                              |  |  |             |                        |  |    |  |                      |  |    |  |
| International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB.....  | \$400  |   |   |       |              |              |  |     |           |  |                            |       |  |  |   |     |  |  |   |       |  |  |   |       |  |  |                           |       |  |  |                                 |  |             |  |   |  |  |  |              |              |   |      |         |       |  |            |  |  |  |    |        |              |              |      |              |        |  |   |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |  |                   |  |  |             |   |  |  |    |                             |  |  |             |  |  |  |    |                              |  |  |             |                        |  |    |  |                      |  |    |  |
| All other situations.....  | \$500  |   |   |       |              |              |  |     |           |  |                            |       |  |  |   |     |  |  |   |       |  |  |   |       |  |  |                           |       |  |  |                                 |  |             |  |   |  |  |  |              |              |   |      |         |       |  |            |  |  |  |    |        |              |              |      |              |        |  |   |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |  |                   |  |  |             |   |  |  |    |                             |  |  |             |  |  |  |    |                              |  |  |             |                        |  |    |  |                      |  |    |  |
| <b>TOTAL OF 21, 22 and 23 =</b>  |  | \$ 1,000.00   |   |       |              |              |  |     |           |  |                            |       |  |  |   |     |  |  |   |       |  |  |   |       |  |  |                           |       |  |  |                                 |  |             |  |   |  |  |  |              |              |   |      |         |       |  |            |  |  |  |    |        |              |              |      |              |        |  |   |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |  |                   |  |  |             |   |  |  |    |                             |  |  |             |  |  |  |    |                              |  |  |             |                        |  |    |  |                      |  |    |  |
| <input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)).<br>The fee is \$250 for each additional 50 sheets of paper or fraction thereof.  |  |   |   |       |              |              |  |     |           |  |                            |       |  |  |   |     |  |  |   |       |  |  |   |       |  |  |                           |       |  |  |                                 |  |             |  |   |  |  |  |              |              |   |      |         |       |  |            |  |  |  |    |        |              |              |      |              |        |  |   |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |  |                   |  |  |             |   |  |  |    |                             |  |  |             |  |  |  |    |                              |  |  |             |                        |  |    |  |                      |  |    |  |
| Total Sheets   | Extra Sheets                                       | Number of each additional 50 or fraction thereof (round up to a whole number) | RATE  |       |              |              |  |     |           |  |                            |       |  |  |   |     |  |  |   |       |  |  |   |       |  |  |                           |       |  |  |                                 |  |             |  |   |  |  |  |              |              |   |      |         |       |  |            |  |  |  |    |        |              |              |      |              |        |  |   |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |  |                   |  |  |             |   |  |  |    |                             |  |  |             |  |  |  |    |                              |  |  |             |                        |  |    |  |                      |  |    |  |
| - 100 =  | /50 =  |   | x \$250.00  |       |              |              |  |     |           |  |                            |       |  |  |   |     |  |  |   |       |  |  |   |       |  |  |                           |       |  |  |                                 |  |             |  |   |  |  |  |              |              |   |      |         |       |  |            |  |  |  |    |        |              |              |      |              |        |  |   |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |  |                   |  |  |             |   |  |  |    |                             |  |  |             |  |  |  |    |                              |  |  |             |                        |  |    |  |                      |  |    |  |
| Surcharge of \$130 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).   |  |   | \$  |       |              |              |  |     |           |  |                            |       |  |  |   |     |  |  |   |       |  |  |   |       |  |  |                           |       |  |  |                                 |  |             |  |   |  |  |  |              |              |   |      |         |       |  |            |  |  |  |    |        |              |              |      |              |        |  |   |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |  |                   |  |  |             |   |  |  |    |                             |  |  |             |  |  |  |    |                              |  |  |             |                        |  |    |  |                      |  |    |  |
| CLAIMS   | NUMBER FILED                                       | NUMBER EXTRA  | RATE  |       |              |              |  |     |           |  |                            |       |  |  |   |     |  |  |   |       |  |  |   |       |  |  |                           |       |  |  |                                 |  |             |  |   |  |  |  |              |              |   |      |         |       |  |            |  |  |  |    |        |              |              |      |              |        |  |   |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |  |                   |  |  |             |   |  |  |    |                             |  |  |             |  |  |  |    |                              |  |  |             |                        |  |    |  |                      |  |    |  |
| Total claims   | - 20 =   |   | x   |       |              |              |  |     |           |  |                            |       |  |  |   |     |  |  |   |       |  |  |   |       |  |  |                           |       |  |  |                                 |  |             |  |   |  |  |  |              |              |   |      |         |       |  |            |  |  |  |    |        |              |              |      |              |        |  |   |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |  |                   |  |  |             |   |  |  |    |                             |  |  |             |  |  |  |    |                              |  |  |             |                        |  |    |  |                      |  |    |  |
| Independent claims   | - 3 =  |   | x   |       |              |              |  |     |           |  |                            |       |  |  |   |     |  |  |   |       |  |  |   |       |  |  |                           |       |  |  |                                 |  |             |  |   |  |  |  |              |              |   |      |         |       |  |            |  |  |  |    |        |              |              |      |              |        |  |   |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |  |                   |  |  |             |   |  |  |    |                             |  |  |             |  |  |  |    |                              |  |  |             |                        |  |    |  |                      |  |    |  |
| MULTIPLE DEPENDENT CLAIM(S) (if applicable)  |  |   | +   |       |              |              |  |     |           |  |                            |       |  |  |   |     |  |  |   |       |  |  |   |       |  |  |                           |       |  |  |                                 |  |             |  |   |  |  |  |              |              |   |      |         |       |  |            |  |  |  |    |        |              |              |      |              |        |  |   |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |  |                   |  |  |             |   |  |  |    |                             |  |  |             |  |  |  |    |                              |  |  |             |                        |  |    |  |                      |  |    |  |
| <b>TOTAL OF ABOVE CALCULATIONS =</b>   |  |   | \$ 1,000.00   |       |              |              |  |     |           |  |                            |       |  |  |   |     |  |  |   |       |  |  |   |       |  |  |                           |       |  |  |                                 |  |             |  |   |  |  |  |              |              |   |      |         |       |  |            |  |  |  |    |        |              |              |      |              |        |  |   |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |  |                   |  |  |             |   |  |  |    |                             |  |  |             |  |  |  |    |                              |  |  |             |                        |  |    |  |                      |  |    |  |
| <input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by ½.   |  |   |   |       |              |              |  |     |           |  |                            |       |  |  |   |     |  |  |   |       |  |  |   |       |  |  |                           |       |  |  |                                 |  |             |  |   |  |  |  |              |              |   |      |         |       |  |            |  |  |  |    |        |              |              |      |              |        |  |   |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |  |                   |  |  |             |   |  |  |    |                             |  |  |             |  |  |  |    |                              |  |  |             |                        |  |    |  |                      |  |    |  |
| <b>SUBTOTAL =</b>  |  |   | \$ 1,000.00   |       |              |              |  |     |           |  |                            |       |  |  |   |     |  |  |   |       |  |  |   |       |  |  |                           |       |  |  |                                 |  |             |  |   |  |  |  |              |              |   |      |         |       |  |            |  |  |  |    |        |              |              |      |              |        |  |   |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |  |                   |  |  |             |   |  |  |    |                             |  |  |             |  |  |  |    |                              |  |  |             |                        |  |    |  |                      |  |    |  |
| Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).  |  |   | \$  |       |              |              |  |     |           |  |                            |       |  |  |   |     |  |  |   |       |  |  |   |       |  |  |                           |       |  |  |                                 |  |             |  |   |  |  |  |              |              |   |      |         |       |  |            |  |  |  |    |        |              |              |      |              |        |  |   |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |  |                   |  |  |             |   |  |  |    |                             |  |  |             |  |  |  |    |                              |  |  |             |                        |  |    |  |                      |  |    |  |
| <b>TOTAL NATIONAL FEE =</b>  |  |   | \$ 1,000.00   |       |              |              |  |     |           |  |                            |       |  |  |   |     |  |  |   |       |  |  |   |       |  |  |                           |       |  |  |                                 |  |             |  |   |  |  |  |              |              |   |      |         |       |  |            |  |  |  |    |        |              |              |      |              |        |  |   |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |  |                   |  |  |             |   |  |  |    |                             |  |  |             |  |  |  |    |                              |  |  |             |                        |  |    |  |                      |  |    |  |
| Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +   |  |   | \$  |       |              |              |  |     |           |  |                            |       |  |  |   |     |  |  |   |       |  |  |   |       |  |  |                           |       |  |  |                                 |  |             |  |   |  |  |  |              |              |   |      |         |       |  |            |  |  |  |    |        |              |              |      |              |        |  |   |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |  |                   |  |  |             |   |  |  |    |                             |  |  |             |  |  |  |    |                              |  |  |             |                        |  |    |  |                      |  |    |  |
| <b>TOTAL FEES ENCLOSED =</b>   |  |   | \$ 1,000.00   |       |              |              |  |     |           |  |                            |       |  |  |   |     |  |  |   |       |  |  |   |       |  |  |                           |       |  |  |                                 |  |             |  |   |  |  |  |              |              |   |      |         |       |  |            |  |  |  |    |        |              |              |      |              |        |  |   |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |  |                   |  |  |             |   |  |  |    |                             |  |  |             |  |  |  |    |                              |  |  |             |                        |  |    |  |                      |  |    |  |
| Amount to be refunded:   |  | \$  |   |       |              |              |  |     |           |  |                            |       |  |  |   |     |  |  |   |       |  |  |   |       |  |  |                           |       |  |  |                                 |  |             |  |   |  |  |  |              |              |   |      |         |       |  |            |  |  |  |    |        |              |              |      |              |        |  |   |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |  |                   |  |  |             |   |  |  |    |                             |  |  |             |  |  |  |    |                              |  |  |             |                        |  |    |  |                      |  |    |  |
| Amount to be charged   |  | \$  |   |       |              |              |  |     |           |  |                            |       |  |  |   |     |  |  |   |       |  |  |   |       |  |  |                           |       |  |  |                                 |  |             |  |   |  |  |  |              |              |   |      |         |       |  |            |  |  |  |    |        |              |              |      |              |        |  |   |                    |       |  |   |   |  |  |   |                                      |  |  |             |  |  |  |  |                   |  |  |             |   |  |  |    |                             |  |  |             |  |  |  |    |                              |  |  |             |                        |  |    |  |                      |  |    |  |

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**NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.**

SEND ALL CORRESPONDENCE TO:

Allen E. White, Ph.D., J.D.  
FULBRIGHT & JAWORSKI L.L.P.  
Fulbright Tower  
1301 McKinney, Suite 5100  
Houston, Texas 77010-3095  
(713) 651-5325

*Allen E. White*  
SIGNATURE

CUSTOMER NUMBER:

Allen E. White, Ph.D.  
NAME  
55,727  
REGISTRATION NUMBER